

## IN THE UNITED STATES PATENT & TRADEMARK OFFICE



In re Application of:	)	Docket No. MGP 81
Sissson, Edwin A., et al	)	Art Unit: Examiner:
For: Article Comprising Light Absorbent	)	
Composition to Mask Visual Haze and	)	I hereby certify that this correspondence is being deposited with the United States Postal Service as
Related Methods.	)	first class mail in an envelope addressed to:
Serial No.: 10/769,167	)	Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on April 28, 2004
Filed: January 30, 2004	)	Elivin a Sisson
		Edwin A. Sisson 48,723

Commissioner for Patents P. O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

## INFORMATION DISCLOSURE IN COMPLIANCE WITH 37 C.F.R. §1.98

As a means of complying with the duty of disclosure set forth in 37 C.F.R. §1.56, the Applicants are calling the following to the attention of the Patent Office and request that they be considered by the Examiner:

United States Patent 4,837,115

United States Patent 5,258,233

United States Patent 6,288,161 B1

United States Patent Application 20030134966

United States Patent 4,501,781

United States Patent 6,444,283 B1

United States Patent 6,346,307 B1

Fogarty, Kevin M. "The Resin Crystal Ball", Proceedings of NovaPack Americas 2004, (2004) pp25-30. plus Polyshield handout.

Marushashi and Iida, "Transparency of Polymer Blends", Polymer Engineering and Science, November 2001, Vol. 41, No. 11

However, the above-listed references may not be prior art under 35 U.S.C. §102 and this document should not be construed as an admission that any of the above-listed references are prior art within the meaning of 35 U.S.C. §102.

05/03/2004 YPOLITE1 00000010 10769167

01 FC:1806

180.00 OP

United States Patent 4,837,115 may be relevant to the prosecution of the subject patent application because it discloses that if the amount added of nylon MXD6 exceeds 10 PHR (parts per hour), the transparency (HZ) of the vessel is drastically reduced. (col 15, 1 14-16).

United States Patent 5,258,233 may be relevant to the prosecution of the subject patent application because it discloses that the low molecular weight polyamides used in a critical amount do not produce any visible haze. If small amounts of the high molecular weight polyamides are used, an acceptable level of haze can be achieved, however, residual acetaldehyde is very large. On the other hand, if larger amounts of the high molecular weight polyamides are used, the residual acetaldehyde can be reduced but only at the expense of haze. (col 17, 136-51)

United States Patent 6,288,161 B1 and United States Patent Application 20030134966 may be relevant to the prosecution of the subject patent application because they disclose orientation [of the article] may have a deleterious effect on the color and clarity of the structure. These problems are caused by a changing the refractive index of the materials when the polymers are oriented. Orientation enlarges the domain size of MXD6 so that it is greater than the wavelength of light and this resulsts in the incrased scattering of light. They disclose that clear structures having improved oxygen barrier proerties can be produced by lmiting the degree of orientation so that the MXD6 domain increases in size up to less than the wavelength of light. (col 4, lines 32 – 44/col 5 lines 1,2; 10-13 and para 23, 25; respectively)

United States Patent 4,501,781 may be relevant to the prosecution of the subject patent application because it discloses a polyamide mixed into polyester and formed into a bottle at a level of up to 30%.

United States Patent 6,444,283 may be relevant to the prosecution of the subject patent application because it discloses the use of low molecular weight polyamides to produce containers with reduced haze.

United States Patent 6,346,307 may be relevant to the prosecution of the subject patent application because it discloses a biaxially oriented article selected from the group consisting of biaxially oriented films and containers formed by using a materail obtained by mising a melted substance comprising an aromatice polyester, premixed with a dianhydride of a tetracarboxylic acid in an amount from 0.01 to 3% by weight; a polyamide derived from m-xylylene diamine and from a dicarboxylic acid with 6-22 carbon atoms in an amount from 2 to 50% by weight ... wherein the polyamide is dispensed in the polyester in domains with an average size lower than 1 micron.

Fogarty, Kevin M. "The Resin Crystal Ball", Proceedings of NovaPack Americas

2004, (2004) pp25-30: plus Polyshield handout may be relevant to the prosecution of the subject patent application because it discloses in the diagram (p30 and handout) PET with MXD6 and 15 micron platelets in the PET.

Marushashi and Iida, "Transparency of Polymer Blends", Polymer Engineering and Science, November 2001, Vol. 41, No. 11 may be relevant to the prosecution of the subject patent application because it discloses that haze naturally becomes higher in blends with larger dispersed particles because the long optical path of the dispersed phase clearly magnifies the small difference in the refractive indices of the MxNylon and PET.

A copy of the above patents and Form PTO-1449 are enclosed herewith.

Respectfully submitted,

Elwin & Sisson

Attorney for Applicants and Inventor

Reg. No. 48,723

M&G Polymers PO Box 590 6951 Ridge Road Sharon Center, OH

Sheet	1 _	of _	1
Silver		~ -	

FORM TO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use several sheets if necessary)

ATTY DOCKET NO. MGP.P.00081

SERIAL NO. 10/769,167

APPLICANT (S)

Sisson, Edwin A., et al

FILING DATE
January 30, 2004

**GROUP** 

U.S. PATENT DOCUMENTS

Examiner Initial	Document Number	Date	Name	Class	Sub- class	Filing Date if Appropriate
Initial	4,837,115	June 6, 1989	Igarashi, et al	428	36.92	
	5,258,233	November 2, 1993	Mills, et al	428	480	
	6,288,161 B1	Sep 11, 2001	Kim, et al	524	538	
	20030134966 A1	July 17, 2003	Kim, et al	524	538	
-	4,501,781	Feb. 26, 1985	Kushida, et al	428	35	
	6,444,283	Sep. 3, 2002	Turner, et al	428	35.7	
					ļ	
						ļļ
					<u> </u>	
					<u> </u>	

## FOREIGN PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Country	Class	Sub- Class	Trans YES	
	-							

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initial	
	Fogarty, Kevin M. "The Resin Crystal Ball", Proceedings of NovaPack Americas 2004, (2004) pp25-30. plus Polyshield handout
	Marushashi and Iida, "Transparency of Polymer Blends", Polymer Engineering and Science, November 2001, Vol. 41, No. 11
EXAMINER	DATE CONSIDERED:

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.